Claims

1. A method for assembling a battery element group comprising the steps of:

Folding the plates, arranging the positive and negative plates alternately, inserting a plate with one of the polarities into a laminated area of the plate with the other polarity, and providing a separator between the positive and negative plates.

2. The method for assembling a battery element group according to Claim 1, wherein the plate with one of the polarities is folded into a continuous S-shape along with the separator integrally, another plate with the other polarity is inserted in the laminated area of that e plate.

3. The method for assembling a battery element group according to Claim 2, wherein the plate with the other polarity is a continuous S-shape folded plate, notches (8) are provided at the cross-positions of the two plates respectively, the two plates are inserted in each other alternatively.

4. The method for assembling a battery element group according to Claim 3, wherein a plate grid is a continuous S-shape folded plate grid, positive active material or negative active material is pasted on the plate grid.

5. The method for assembling a battery element group according to Claim 3, wherein the plate grid is a continuous S-shape folded plate grid, the plate grid is divided into two halves at the notch (8) where is in the middle of the plate grid, one half is pasted with positive active material and the other half is pasted with negative active material.

6. The method for assembling a battery element group according to Claim 1, wherein the plate with one of the polarities is folded into U-shape or S-shape along with the separator integrally, another plate with the other polarity is inserted in the laminated area of that plate.

7. The method for assembling a battery element group according to Claim 1, wherein the plate grid is made of grid material and produced by punching,

expanding or weaving, and is then cut into a desired length and width according to the size of the element group.

8. The method for assembling a battery element group according to Claim 7, wherein the plate grid material is made from pure lead, lead-base alloy, iron-base alloy, copper-base alloy, or nickel-base alloy.

9. The method for assembling a battery element group according to Claim 7, wherein the plate grid material is one of the forms of strip, wire, plate, foam, or net.

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10. A battery comprising:

A case (1), posts or terminals (2) having one end placed outside the case, the other end inside the case and connected to the bar of the battery element group, wherein a plate being placed in the space of case being in the shape of folding, the positive and negative plates (3, 4) being arranged alternately, the plate with one of polarities being inserted into the laminated area of the plate with the other polarity, and a separator being provided between the positive and negative plates.

11. The battery according to claim 10, wherein the plate with one of the polarities being folded into U-shape or S-shape along with the separator integrally, another plate with the other polarity being inserted in the laminated area of that plate.

12. The battery according to claim 10, wherein the plate with one of the polarities being folded into a continuous S-shape along with the separator integrally, another plate with the other polarity being inserted in the laminated area of that plate.

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13. The battery according to any one of the claims 10, 11, and 12, wherein the plate with the other polarity being a single sheet of plate.

14. The battery according to any one of the claims 10, and 11, wherein the plates with the other polarity being the folded plate having a corresponding shape.

15. The battery according to claim 12, wherein the plate with the other

polarity being a continuous folded plate, notches (8) being provided at the cross-positions of the two plates respectively.

16. The battery according to any one of the claims 10, 11, and 12, wherein the plate being provided between two separators and folded integrally.

17. The battery according to claim 12, wherein grid holes (6) being distributed on the whole surface of the plate.

18. The battery according to claim 12, wherein grid holes (6) being distributed on the surface of plate below the connecting strip (7) of the plate grid.

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